

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Art Unit: 2179  
Kenneth L. Levy Conf. No.: 2418  
Application No.: 10/602,549  
Filed: June 23, 2003 **Via Electronic Filing**  
For: Embedded Data Windows in Audio  
Sequences and Video Frames  
Examiner: Jordany Nunez  
Date: April 7, 2008

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

Appellant requests review of the final rejection (mailed November 15, 2007) in the above-identified application. No amendment is filed with this Request.

This Request is filed with a Notice of Appeal.

The review is requested for the reasons stated on the attached sheets. No more than five (5) pages are provided.

Respectfully submitted,

Date: April 7, 2008

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**Reasons for Pre-Appeal Brief Request for Review**

Analysis:

On appeal the rejection of claims 1-16, 23, 25, 27-30, 33 and 35-40 will be reversed. Some of the reasons for reversal are discussed below.

**Claim 40**

*Schuman (US 6,950,532 B1) does not discuss “averaging” a plurality of content portions, and detecting from data representing “averaged” content portions.*

It is well settled that in order for an Examiner to establish a *prima facie* case of anticipation, each and every element of the claimed invention, arranged as required by the claim, must be found in a single prior art reference, either expressly or under the principles of inherency. *See generally*, *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677-78 (Fed. Cir. 1988); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

Schuman does not anticipate claim 40 because it does not include – either expressly or inherently – averaging a plurality of content portions, and detecting auxiliary data from data representing averaged content portions, in combination with its other claim elements.

The final Office Action cited Schuman at Col. 6, lines 24-34, Col. 6, lines 33-43 and Col. 7, lines 42-52 as meeting these features. *See* page 8, last two lines. We respectfully disagree. For example, while these passages discuss timing of imaging devices, spacing of image elements, temporal expansion and disruption directives, there is no discussion regarding detecting auxiliary data from data representing averaged content portions.

The final Office Action further alleges that the term “*spacing*” means “*averaging*” in the context of claim 40. *See* the final Office Action, page 9, lines 15-23, *citing* Schuman at Col. 6, lines 16-24 and lines 33-43. This is an improper reading of Schuman, one that an ordinarily skilled artisan would not make.

Schuman’s reason for his “*spacing*” is to provide so-called moiré patterns in a recorded image. *See* Schuman at Col. 6, lines 21-24. This disclosure would not lead one of ordinary skill in the art to average a plurality of content portions, and detect auxiliary data from data representing averaged content portions, where the auxiliary data is relatively more detectable from the data representing averaged content portions compared to individual portions including the auxiliary data.

The final rejection of claim 40 will be reversed on Appeal.

### **Claims 16 and 33**

*The final rejection of claims 16 and 33 will be reversed on appeal for reasons analogous to those discussed above with respect to claim 40.*

Claim 16 recites a detection method for the video embedded (claim 1). The detection method includes averaging a plurality of the video frames including the first and second frames; the averaging improves the signal to noise ratio of the identification data to video content. Claim 33 recites a detector to detect the data provided (claim 28). The detector averages a plurality of video frames so that provided data becomes consciously perceptible.

The final rejection of claims 16 and 33 will be reversed on appeal for reason analogous to those discussed above with respect to claim 40.

### **Claim 1**

*Schuman fails to anticipate each limitation of claim 1.*

Claim 1 recites a method of embedding identification data in video. The method includes *embedding the identification data in a first video frame* prior to distribution or projection of the video, the embedded identification data being visually perceptible upon examination of the first frame; selecting a second video frame, wherein the first and second video frames are separate frames; and *embedding the identification data in the*

*second video* frame prior to distribution or projection of the content, the embedded identification data being visually perceptible upon examination of the second frame, wherein the identification data is *generally imperceptible* upon real-time rendering of the video.

The cited Col. 7, lines 42-53, passage states that disruption directives may be carried in the actual digital film data itself. But these “disruption directives” cooperate with a so-called “disruptor” to disrupt projection to introduce anomalies or modulation in the projected film. *See* Col. 5, lines 11-14, Col. 8, lines 52-64 and Figs. 1-6. So these “disruption directives” control or influence the disrupter.

The relied upon Schuman passage does not embed the disruption directives (or disrupter control information) in the *first and second* frames so as to be *visually perceptible upon examination* of the first frame and second frame, but generally *imperceptible* upon real-time rendering of the video. There is no mention of this at all.

Indeed, Schuman’s disruption directives (or control information) include information that controls the disrupter to insert anomalies or modulations during projection. The disruption directives are not the projected anomalies themselves.

The Examiner points to Col. 17, lines 29-34, to “clearly teach” these features of the invention. *See* the final Office Action, page 12, last paragraph. We disagree. This Schuman passage: “*One skilled in the art will recognize that any image generation device with the proper timing may be used to create images as per the disclosed invention*” provide no additional details of the subject claim language.

The final rejection of claim 1 will be reversed on appeal.

## Claims 2 and 8

Claim 2 recites that the act of selecting (claim 1) comprises selecting the second frame so that the repetition of the embedded identification data is imperceptible to the human conscious mind when rendered. And Claim 8 recites that a second frame is selected so that the repetition of the embedded identification data is imperceptible to the unconscious human mind.

The cited Schuman Col. 6, lines 24-33, passage (“human eye may not detect them”) relies on “reduced intensity” of generated images and not repetition of embedded identification data.

We are quite confused by the Examiner’s interpretation of claim 2 on page 13, lines 7-12, of the final Office Action. Citing Schuman at Col. 6, lines 17-21, the Examiner suggests that “intensity” refers to “intensity of repetition”. Yet, there is no discussion in this passage to support this interpretation. In fact, in the context of the cited passage (lines 24-33) “intensity” more likely means “brightness” or “signal strength”.

Undoubtedly, the final rejection of claim 2 will be reversed on appeal.

### **Claim 3**

Claim 3 recites that the identification data (of claim 1) is embedded in the same frame location in each of the first and second frames.

The cited Schuman, Col. 6, lines 58-67, passage does not discuss this feature. Rather, it discusses identifying information may indicate a location and time that an event was recorded. The parenthetical on page 3 of the final Office Action, and the remarks on page 13, seem to evidence a misunderstanding of claim 1. Claim 1 recites that embedded data is preferably imperceptible when rendered in real-time. Yet, the Examiner’s remarks assume perceptibility upon rendering, which is counter to claim 3.

The final rejection of claim 3 will be reversed on appeal.

### **Claim 23**

Claim 23 recites – in combination with other features – a method of marking content with auxiliary data. The method is characterized in that the auxiliary data is embedded in the content prior to distribution or projection of the content so as to be humanly perceptible if examined in a finite segment or frame of the content, but is embedded in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time.

The final Office Action cites Schuman at Col. 7, lines 42-53. As discussed above with respect to claim 1, this passage discusses that so-called disruption directives (or disruptor control information) can be included in digital film. But there is no discussion

in this passage to anticipate control information that is perceptible if examined in a finite segment, but that is imperceptible when examined as the content is rendered.

Moreover, the final Office Action misinterprets Schuman. For example, the final Office Action cites to disruption directives (Col. 7, lines 42-52) but then says that a generated image may contain disruption content. Recall, however, that the disruption directives *control the disruptor* to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves.

The final rejection of claim 23 will be reversed on appeal.

### **Claim 37**

Claim 37 recites – in combination with other features – embedding auxiliary data in the content through modifications of portions of the content. The modifications occur prior to distribution or projection of the content.

Moreover the modifications are humanly perceptible if examined in a finite segment or frame of the content, but are provided in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time. As discussed above, disruption directives (Col. 7, lines 42-52) control a disruptor to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves.

The final rejection of claim 37 will be reversed on appeal.

### Remaining claims and Conclusion:

We respectfully request that prosecution be reopened and a Notice of Allowance issued. Some of the patentability reasons pertaining to the remaining claims are detailed in Applicant's August 29, 2007 Amendment.

Date: April 7, 2008

Respectfully submitted,

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